PPC-14121

Εμπλουτισμός λιστών ΑΦΜ & Αρ. Παροχής με ΚΑΔ

Low Level design

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1 INTRODUCTION

The need to enrich VAT & Supply number (AADE activity code) for the purpose of identifying special professional categories eligible for subsidies.

FUNCTIONAL REQUIREMENTS

Relevant BRD can be found here: BRD

TECHNICAL REQUIREMENTS

For the project, the following need to be implemented:

- An application service running on Azure that handles the VAT retrieval process from a csv, the communication with AADE for the information regarding the VAT and stores the results to a csv file.
- A Vault where the keys for the AADE API are stored
- Monitoring and Analytics modules.

In order to be supported the above functionalities, the Azure resources that are visible below have been provisioned on the existing subscription “Commercial Analytics”. Specifically, all the resources in order to be isolated have been grouped on “rg-comm-analytics-aade-prd-weu”.

Type	Environment(s)	Role	Name	Region	Remarks
App Service Plan	Production	To host the business logic App Service	Asp-comm-analytics-aade-prd-weu	West Europe	P1V3, Linux, 2 vCPU, 8GB RAM, 250GB Remote Storage, Single Instance
App Service	Production	Host the business logic	App-comm-analytic-aade-prd-weu		
Application Insights	Production	Logs and insights for the business logic App Service	appi-comm-analytic-aade-prd-weu	West Europe	Log Analytics ingestion mode, sampling disabled
App Service Slot	Production	Business logic App service alternative deployment slot	alt	West Europe	
Key Vault	Production	Cloud service for securely storing and	Kv-comm-analytics-aade-d	West Europe	

Commented [SN1]: @Dimellas Evangelos Can you add ,with cooperation with CCoE, what azure components needed for this project.

Commented [DE2R1]: @Stamellos Grigorios @Tsiaraosis Panagiotis

Commented [GS3R1]: @Dimellas Evangelos table has been added

		accessing secrets			
Virtual Network	Production	Isolated network provides private network on azure	Vnet-comm-analytics-aade-prd-weu	West Europe	

For the project's scope, all the above mentioned resources have been provisioned only in production domain.

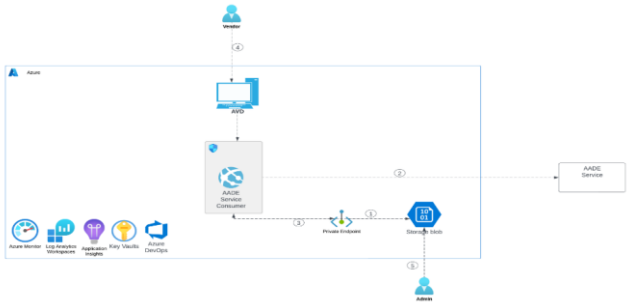
DETAILED SOLUTION ARCHITECTURE

The solution is very simple so a lot of the following sections are not applicable. Since the system comprises only of one block a lot of diagrams are the same

ARCHITECTURE DIAGRAMS

Systems block diagram

The system is the AADE service consumer block that handles the business logic.



The blob service containers and storage are defined in the code as follows:

```
const blobServiceClient = new BlobServiceClient(`https://commercialsa.blob.core.windows.net/`,credential);
const blobContainerClient = blobServiceClient.getContainerClient('wemetrixaade');
const blockBlobInputClient = blobContainerClient.getBlockBlobClient('Input/KAD_TAXID_2023_12_27.csv');
```

Therefore the .csv file containing the related VATs is hardcoded in the application.

A typical input .csv file contains VATs (one per line):

0534433344,
0534433444,
...

A typical output .csv file is as follows:

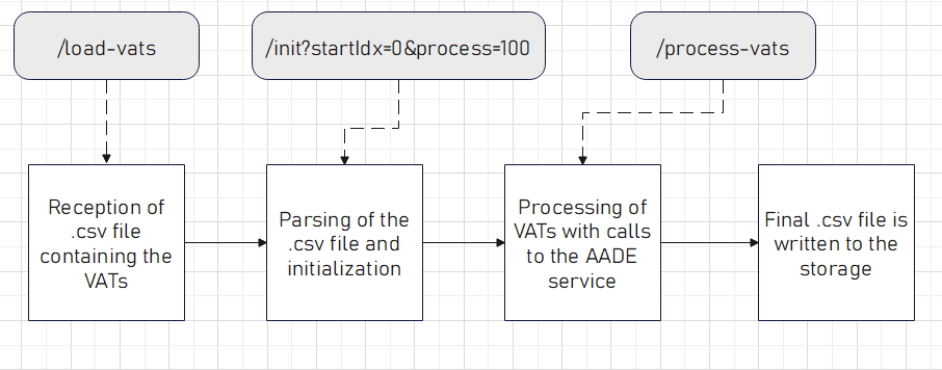
Commented [SN4]: @johnp@wemetrix.com can you describe the process of how you read the file from blobl storage , under which condition you splitted , what you get as response and what is ituploaded in blob ,what is the endpoint of blob storage you .
provide some details about this action please

Commented [SN5]: @johnp@wemetrix.com does a retry mechanism exists? could you provide some info?

FEEDBACK I DO NOT HAVE THE END DATA

Sequence diagrams

Commented [SN6]: @johnp@wemetrix.com sequence diagram should be included.



There is only one sequence which has the following steps:

1. AADE Service consumer receives .csv file with the VAT to be processed from the Storage blob. Call to the application's endpoint: /load-vats. This endpoint loads the whole .csv file in memory
2. AADE Service consumer uses the .csv file to request from AADE Service to "KAD" related data for VATs contained in .csv file. Call to the application's endpoint: /init?startIdx=0&process=100 where startIdx, startIdx+process define the range in lines in the file that holds the VATs that will be processed.
3. Processing begins. Call to the application's endpoint: /process-vats to start the processing of the VATs.
4. AADE Service consumer writes the information retrieved to Blob Storage.

A .csv file named Output/startIdx_startIdx+process will be generated with the AADE service results

NOTE:

The vendor Implementation initiates this process in batches of x number of VATs based on startIdx,process paramters and then admin accesses to Storage Account to retrieve the results.

In case of an error (the AADE API did not return the desired result:

No extra action is performed. The system registers the VAT that caused the error to the CSV file and upon review of the file by the Data Analytics team, the problematic VATs may be reevaluated (in case there was an error of the API response and not an error of a VAT that does not exist in the AADE database since it refers to an individual and not a company)

Deployment diagram

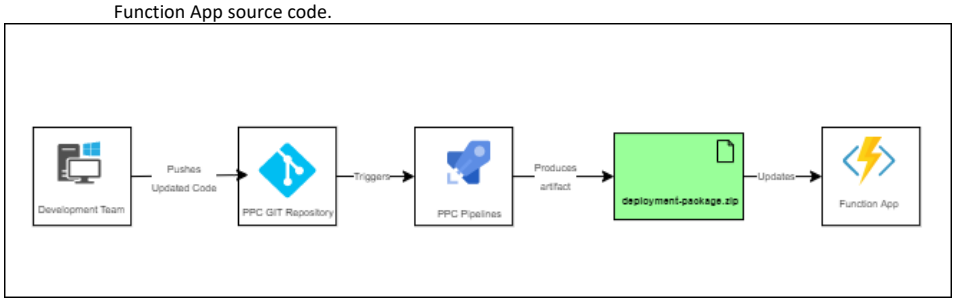
Commented [SN7]: @Dimellas Evangelos probably CCoE can help us on this :
add the delpoyment diagram

Commented [GS8R7]: @Dimellas Evangelos The respective section has been added

In terms of the project, in order the solution's components to be deployed, new DevOps processes have been implemented. More specifically in regard to aade-analytics Function App:

- Respective codebase must be maintained in the existing Azure DevOps project 'PPC – Commercial Analytics', to new GIT repository of PPC 'PPC-AADE-KAD'.
- Its functionality must be available at production environment only.

- Build pipelines must be implemented for production environment, that will be triggered by a GIT push operation at the corresponding branch.
- The development team will run build pipeline for production environment, in order to update the Function App source code.



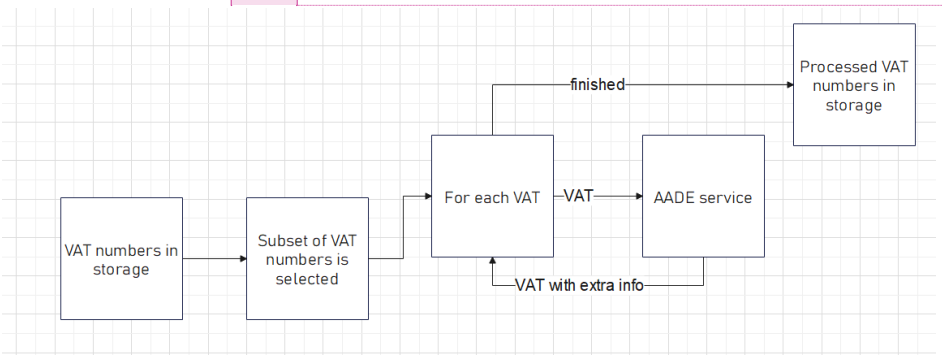
N/A

LIST OF FUNCTIONS & SYSTEMS

Function/capability	System/component	Existing/new	System owner/delivery team	Contact person	Tech spec or documentation ref
AADE communication	**AADE Service consumer**	new	WEMETRIX	Panagopoulos	-

DATA ENTITIES & DATA FLOWS

Commented [SN9]: @johnp@wemetrix.com flow diagram should be added



5. **AADE Service consumer receives .csv file with the VAT to be processed from the Storage blob.**

6. **AADE Service consumer uses the .csv file to request from AADE Service to "KAD" related data for VATs contained in .csv file**
7. **AADE Service consumer writes the information retrieved to Blob Storage.**
8. **Vendor Implementation initiates this process in batches of x number of VATs.**
9. **Admin accesses to Storage Account**

SOLUTION TECHNOLOGIES

An nodeJS/express application

DETAILED DESCRIPTION OF INTERFACES WITH OTHER SYSTEMS

Commented [SN10]: @johnp@wemetrix.com can you add a sample request and response.

The only interface of the system is the one with AADE API. The endppoint is:

https://www1.gsis.gr/wsaade/RgWsPublic2/RgWsPublic2?wsdl

The wsdl describes fully the required input/output of the system

SYSTEMS INTERFACES

N/A

APPLICATIONS INTERFACES

N/A

DETAILED DESCRIPTION OF SYSTEM CONFIGURATION

Apart from the initial deployment there is no extra need for any special configuration except the username/password loading to the vault for authentication with AADE

DETAILED DESCRIPTION OF NETWORK CONFIGURATION

N/A

DETAILED SYSTEMS, NETWORK & INFORMATION SECURITY CONFIGURATION

N/A

TEST DATA / TEST METHODOLOGY & ENVIRONMENTS

N/A

ENVIRONMENTS

TEST DATA

SECURITY TESTS

UNIT TESTS

SYSTEMS INTEGRATION TESTS

STRESS TESTS / PERFORMANCE TESTS

ACCEPTANCE TESTS

REFFERALS / RELATED DOCUMENTS ()

<HLD>

<SUGGESTIONS>

<DEMANDS>

<FEASIBILITY STUDY>

<CONTRACTS>

<OTHER PROJECT DOCUMENTS>

Digital Systems
Development and Operation
Division

DOCUMENT INFORMATION

Title:	**[Document Title]**

Start Date :	[YYYY.MM.DD]	Modify Date:	[YYYY.MM.DD]
Document Code:		Modify Number:	1.0
Document Rating:*	Εσωτερικό		

*Document Rating: Ungated, Interior, Confidential, Classified

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Revision History	Comments
1.0	Original Version